TRADE AND INVESTMENT STRATEGIES, JOBS AND POVERTY

Jagdish N. Bhagwati and Ricardo Martin,
Consultants */

*/* The authors Jagdish N. Bhagwati, Ford International Professor of Economics and Ricardo Martin are members of the Massachusetts Institute of Technology (M.I.T). The opinions expressed in this study are the exclusive responsibility of the authors.

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/I. INTRODUCTION
INTRODUCTION

The experience of many developing countries during the last three decades has underlined the extreme complexity that surrounds the implementation of the objective of poverty eradication. There are no simple, but many simplistic solutions.

On the other hand, theoretical reflections on the many excellent empirical studies of the developmental strategies during this period, suggest that there are several areas of policy-making where we can improve the situation in the direction of a greater impact on poverty-amelioration. Possibly the impact of each such reform may be small. But the task is so enormous, the value of even a small gain is so large, and the capacity of economists to arrive at meaningful quantitative estimates on these questions is so limited, that we should not be deterred from recommending anything that seems to promise to help in this enormous task!

Since the historical experience of the developing countries is critically important to our analysis, we begin in Section II with an overview of the central ideas and practices of the developing countries on the question of development strategies and expected impact on poverty. The reasons underlying the focus on import-substitution (IS) strategy for growth and the reasons for the focus on growth to reduce poverty, are explained. Section III considers then the now-classic question of the relative effectiveness of the IS and EP (export-promoting) strategies in promoting economic growth, as also in increasing employment directly (i.e., at any given growth rate). Section IV addresses questions which are also "external" but which relate rather to what the developed countries do; essentially the question of the "new protectionism" is raised and also questions of international migration (a problem that affects certainly one Latin American country, Mexico, deeply, and has a bearing on the employment situation in countries such as Haiti, Jamaica and Barbados, to take only the obvious examples). The reader is forewarned that we avoid discussing any "internal" policies in regard to the issue of growth and employment except in so far as they relate to, and interact with "external" policies.
II

THE POSTWAR DEVELOPMENTAL STRATEGIES: THEORIES AND PRACTICE

(a) The economic thinking in the early 1950s was largely dominated by one of three pessimistic views about redistribution as a method of ameliorating poverty. First, it was thought that for many LDCs, any significant redistribution of assets or income was simply politically unfeasible. Land reforms in South Korea and Taiwan, for example, had been imposed by foreign powers rather than domestically conceived and implemented. A radical view would be that the ruling elites, whether in a pluralistic democratic framework or a dictatorship, could not be expected to undertake redistribution any more than a chicken would assist in plucking its own feathers. Second, even if it was feasible, some believed that redistributive measures such as land reform would be far too disruptive in the short and medium-run to permit their being undertaken without a serious risk of failure. Finally, there was the familiar fear of a trade-off between equity and growth, even if the redistributive measures were feasible and non-disruptive. For, if the redistribution led to lower productivity and/or savings rate and/or rate of technical change, growing population would soon lead to a resurrection of poverty, even though a short-run dent had been made in it.

(b) Emphasis therefore came to be placed on the "technocratic" solution of having more rapid growth as the only effective and feasible solution to poverty eradication. If the developing country in question was characterized by a Marx-Lewis type of reserve army of unemployed labour, somewhere, the rapid growth of the economy would presumably bring these unemployed into productive employment at the going real wage. On the other hand, if the developing country was in a "neoclassical" situation, the growth would lead to rise in real wages and thereby lift the poor, low-productivity, low-income members of the workforce into higher productivity, rising real-wage occupations. Either way, the poor at the bottom of the income distribution would enjoy the "trickle-down" effects of rapid growth, regardless of whether their relative incomes improved.
The developmental strategies pursued by many developing countries in the 1950s can therefore be explained as responses to the existing perceptions of the constraints on redistribution as a means to reduce and eradicate poverty. Influenced by the Rostowian take-off notions, defined largely in terms of an enhanced savings-investment ratio, as also by planners' use of the Harrod-Domar framework to calculate the investment and savings requirements to achieve target rates of growth, the developmental policy-makers at the time came to regard the use of fiscal policy to raise domestic savings rates on a continuing basis as a principal developmental role of governments.

(c) But another principal element of the developmental strategies for growth was to be the encouragement of import-substituting industrialization: which has come to be described in the subsequent literature as the Import-Substituting (IS) strategy. Many intellectual strands contributed to the appeal of this strategy.

(1) In Latin America, it was the influence of Raúl Prebisch, (United Nations, 1950, 1951), whose thesis on the declining terms of trade for primary products, as a consequence of the asymmetric effect of technical change in the center and the periphery and the low elasticity of demand for export of primary products, provided a rationale for a shift to industrialization. Elsewhere, however, the intellectual stimulus came from other directions.

(2) Ragnar Nurkse (1959) proceeded from the hypothesis of elasticity pessimism on the primary product exports of developing countries, to argue that the developing countries had no option except to choose a balanced growth strategy that implied significant domestic production of the erstwhile imported manufactures.

(3) This version of the prescription for "balanced" inward-looking growth was reinforced by the Rosenstein-Rodan (1943) version which proceeded by arguing for co-ordinated investments in different industries as a method of escaping from the hypothesized lack of inducement to invest in a decentralized decision-making set-up characterized by initial stagnation. To make sense, the Rosenstein-Rodan argument also required, in addition to the hypothesis of technological indivisibilities, the presumption
that foreign markets were unavailable to solve the problem; thus converging, not merely in the recommendation of balanced growth, but also in its elasticity pessimism with Ragnar Nurkse's conceptually different posing of the problem.

(4) The Nurkse-Rosenstein-Rodan arguments were reinforced, in turn, from a theoretical standpoint by the "structural" growth models of Feldman (1964) and Mahalanobis (1953) which emphasized the possible incapacity of an economy to translate ex-ante savings into investment if there was an export bottleneck at the margin and non-malleability of capital: thus providing a rationale for the creation of a domestic capital goods industry.

(5) The two-gap computable models of Chenery and associates (e.g., Chenery-Bruno, 1962), essentially provided the numerical versions of these ideas, yielding target outputs for domestic production in manufacturing and other sectors, given the (pessimistically) projected growth of exports, the input-coefficients and demand elasticities.

But while, intellectually, these different strands of developmental thought converged to provide the rationale for industrialization of the developing countries, and evolved primarily from a pessimistic view of the external trade prospects for the primary exports of the developing countries, the effective economic stimulus for industrialization in many developing countries was to come primarily from what came to be known as the pattern of reluctant exchange rate adjustments - partly a legacy of the historical-experienced-induced postwar thinking about the superiority of fixed over flexible exchange rates.

Of course, some countries (such as India) under the influence of structural thinking, whether of the Nurkse or Rosenstein-Rodan or Feldman-Mahalanobis variety, proceeded to plan for industrialization by constructing investment and output targets designed to dovetail into one another in computable, consistency (and later, optimization) models of increasing detail and complexity, buttressing them with licensed imports and control of industrial investments irregardless of costs.

But this situation where the degree and chaotic pattern of import substitution were chosen by reference to plans and targets, and the use of exchange (and industrial licensing) controls was merely "supportive", must be contrasted
be contrasted with the far more frequent situation, applicable certainly to many countries of Latin America, where the restrictive trade-and-payments régime was the "inadvertent" and initiating cause of the observed degree and (chaotic) pattern of import substitution. And for this wider class of developing countries, the inefficiencies of import-substitution strategy cannot be appreciated unless the analyst also bears in mind that a major source of "protection" and hence "import substitution" was overvaluation rather than a set of protective tariffs. For the use of the QRs on a considerable scale leads generally to a whole set of inefficiencies in intersectoral resource allocation as also in resource utilization within sectors which cannot be captured meaningfully by turning the QR-generated import premia into equivalent tariffs (as has often been the practice in studies of protection in developing countries); this being the central aspect of the Bhagwati-Krueger NBER Project's focus and conclusions.

We turn now to the effects of the IS strategy on growth and on direct employment, drawing on the results of several empirical studies that strongly suggest that a shift to EP strategy is advantageous on both counts.

III

IS VERSUS EP STRATEGIES IN DEVELOPING COUNTRIES

A. Characteristics of the Strategies

(1) Thus, the IS strategy of industrialization was often a result of overvaluation of the exchange rate, frequently resulting from rapid inflation and a lagging adjustment of the exchange rate. This was tantamount ironically to a de facto implementation of the celebrated Hirschman (1958) presentation (in his book on The Strategy of Economic Development) to slash imports and create inducement to invest in import-substituting activities quite regardless of costs and benefits in the economic sense. For the scarcity of foreign exchange in this system

See Hirschman (1968) for an interesting discussion of the factors underlying Latin American industrialization.
stimulated attitudes of automatic protection to domestic industry, as exemplified for example by the Indian regulations on indigenous availability and the Brazilian "law of similars", under which imports were strictly reduced or eliminated so as to protect domestic import-substituting output.* There is evidence that, in the few cases where protective tariffs were sought and granted by tariff-making bodies in Pakistan and India, the practice of automaticity of protection had become so ingrained in the system due to use of QRs that even the tariff-making bodies essentially wound up recommending whatever tariff was necessary, in view of cost figures, to protect the output-level targetted by the claimant industry.**

(2) The other important point to note about the IS strategy (whether a result of the overvaluation or of the balanced-growth and targets-licensing variety distinguished in Section II) is that it made substantial sense when the developing country was entering the early stage of industrialization but little sense when domestic industrialization had taken root.

For the former case, what might be called Stage I economies, the IS strategy essentially was supportive of a shift towards industrialization away from specialization on primary and agricultural production: and we find little to quarrel with that, though we must emphasize that the pattern, as distinct from the degree, of such import-substitution was far from desirable in view of the chaotic pattern of resource-allocational incentives that the exchange control regimes produced as the overvaluations became an enduring feature of the country.

For the latter case, which might be called Stage II economies (or, equally, "semi-industrialized" economies), the effect of the IS resulting from overvaluation was not to increase industrialization at the expense of agriculture or primary production, but rather and more importantly, to bias the industrialization itself towards the home market and away from the foreign markets. This bias against export markets and the chaotic

* This is documented and discussed at length in the synthesis volume by Bhagwati (1978, Chapter 2) for the Bhagwati-Krueger NBER project.

patterns of incentives, both implied by the overvaluation, result in an inefficient and expensive form of industrialization, as documented in the early OECD studies organized by Little, Scitovsky and Scott (1970) and, with much sharper focus on the role of QR-regimes, in the NEER studies organized by Bhagwati (1978) and Krueger (1978).

By contrast, the EP strategy has offset the bias against exports with use of export subsidies to bring the effective exchange rates on exports much closer to those on imports initially and often, and more importantly, with the use of appropriate domestic monetary and fiscal policies plus adjustments in exchange rates to reduce any overvaluation to minor and unimportant levels.

Empirical studies of outward-oriented countries such as South Korea and Taiwan typically show average \( \frac{EER}{EER_m} \) with \( EER > EER_m \) far more often than the reverse, whereas the inward-looking countries typically show average \( \frac{EER}{EER_m} \) by sizeable magnitudes. For this reason, Bhagwati (1978) has defined the EP strategy as one that is relatively neutral and does not discriminate against exports, i.e., as one where \( \frac{EER}{EER_m} \) (rather than as one that reverses the bias so as to encourage exports, i.e., \( EER > EER_m \)).

In terms of the now-familiar Bhagwati-Krueger, Phase-sequencing of exchange-control regimes in developing countries, the IS strategy is observed in Phase II and the transition to Phase IV marks the successful shift to the EP strategy.

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\*\*\* For a detailed delineation of the Phases, see Bhagwati (1978) or Krueger (1978). These phases enable the analyst to examine more illuminatingly the evolution of the trade-and-payments regimes that define the type of incentives and constraints that govern intersectoral resource allocation and intra-sector efficiency of use of resources.

/C. Growth
B. Growth effects

The EP strategy has been observed in a number of empirical studies as being associated with more rapid growth. And, this higher growth does not seem to have been at the expense of current income or employment, rather, as we shall see in the next subsection, it has been accompanied also by more rapid creation of jobs and (as one would expect from the empirical review of the literature on the link between jobs and poverty by Ahluwalia in Chenery et al. 1974) reduction of poverty.

The links between the EP strategy and growth can be sought in many areas. The most direct relates to the link, at the outset, between the EP strategy and exports and then the link, in turn, between exports and growth. Other, not necessarily independent, are through increment in savings, in the influx and efficiency of foreign investment, in innovation, in cost-consciousness, and in the productivity of given resources both intersectorally and within sectors. We will consider each of these, drawing heavily on the discussion in Bhagwati (1978, Chapters 7 and 8).

(1) With respect to exports and growth, two steps in the argument need to be distinguished here: (i) exports increase under EP strategy; (ii) superior export performance is associated with superior economic performance in shape of increased growth rates. These two steps have now been established empirically in a number of studies although explanation of the link between export and economic performance still raises a number of unsettled questions.

(i) The relationship between Phave IV or "liberalized" régimes implied by the EP strategy and export performance emerges from numerous studies which have now established an orthodoxy of export optimism, just the opposite of the earlier export pessimism! The effect of the elimination of the bias against exports on a sustained basis, under a successful transition to an EP strategy, was shown in the Bhagwati-Krueger NBER project to be associated with sustained improvement in export performance. This "price-sentivity" of exports, including particularly "minor" exports which steadily grew to larger and significant levels under suitable maintenance of external profitability, emerged there in many regressional analyses of specific exports in the country studies.*

*/ For a review, see Bhagwati (1978, Chapter 7, pp. 182-191).
Equally important, however, is the conclusion that Phase II, with exchange controls dominant on the payments scene, militates against export performance also because it often removes the flexibility of response to external market opportunities by making rapid and free access to raw material imports, among other things, difficult. In countries with industrial licensing, moreover, Phase II and associated IS strategy also implied frequent inability to expand capacity swiftly enough to fill export orders.

(ii) Export performance, in turn, is well associated with growth of GNP. Here, too, we have much regresional evidence by many authors. In the Bhagwati-Krueger NBER Project, the Krueger (1978) synthesis volume contains the following regression, based on a sample of the 10 countries studied for the period 1954-1971:

$$\log Y_{it} = A_i + B_i \cdot t + C \log X_{it} + D \cdot T_{lit} + E \cdot T_{2it}$$  \hspace{1cm} (I)

where:  
$Y_{it}$ = GNP at constant prices for country i, year t  
$X_{it}$ = Index of dollar value of export for country i period t  
$T_{lit}$ = t if country i is on Phase I or II in period t; 0 otherwise  
$T_{2it}$ = t if country i is in Phase IV or V in period t; 0 otherwise

Results:  
$C = 0.11 \ (4.3)$  
$D = 0.08 \ (.85)$  
$E = 0.16 \ (1.7)$ \hspace{1cm} (numbers in parenthesis are t values)

The equation (I) shows that exports tend to be associated with higher trend value of GNP during periods of liberalization (i.e., during Phase IV and the less frequent Phase V of convertibility on capital account), although the hypothesis $E = 0$ cannot be rejected at a high level of significance.

The earlier, cross-sectional work of Kravis (1971), and the recent work of Michaely (1977), Heller and Porter (1978) and Balassa (1978), to cite some of the notable studies, also support the view that exports correlate well with growth. Heller and Porter (1978), for example, obtain a Spearman rank correlation coefficient of 0.452 between growth in exports per capita and growth in other elements of GNP for Michaely's sample of 41 countries, including 12 Latin American countries, and using average growth rates for 1950-1973. When the sample is divided into “rich” and “poor”

/countries, the
countries, the coefficients are 0.57 and 0.097 respectively. Again, Balassa uses a sample of 9 countries, including Argentina, Brazil, Mexico, Colombia and Chile, with similar results. Thus, his correlation coefficients for growth rates of exports and GNP are 0.822, 0.93, and 0.88 and for exports and rest of GNP are 0.482, 0.763 and 0.77, for the periods 1900-1966, 1966-1973 and 1960-1973 respectively.

The question is: Why? Why should a substantial reduction in bias against exports, and hence in export performance, be associated with greater growth? The main reason may be, as strongly suggested by Díaz-Alejandro in his study of Colombia for the Bhagwati-Krueger project, the advantage of a steadier foreign exchange position resulting from improved export earnings. This relates somewhat to the well-known demonstration that, under a foreign exchange bottleneck (in the sense of Chenery), additional foreign exchange is more productive than under a savings bottleneck. We should also note that a comfortable external payments situation eases up excess capacity (generated largely by the QR régime in the first place), may reduce the need to hold excess inventories and leads often to elimination of critical bottlenecks, and so on. It is perhaps remarkable that these kinds of problems, attendant on economies in Phase II, are rarely to be found in Phase IV and V economies that have successfully transitioned to the EP strategy on a continuing basis.

(2) An additional factor of relevance here is the intersectoral and intrasectoral productivity of resources, and the relative effect of the EP and IS strategies thereon. As already noted, the EP trade régime does not tend to carry the export subsidization, on the average, to such lengths as actually to make the ratio \( \frac{EER^x}{EER^m} \) substantially greater than unity. That is, the EP strategy amounts by and large to having the ratio \( \frac{EER^x}{EER^m} \) fairly close to unity. It would thus appear plausible to conclude that the EP strategy tends generally to be less given to overall excesses than the IS strategy and that, in practice, this may be the source of its asymmetrical economic advantage. If so, we must ask again why this asymmetry exists in practice. The reasons would seem partly to consist in the fact that the successful shift to export-promoting strategy (or Phase IV) generally takes place within the overall context of continuing exchange controls.
exchange controls by that the QR-caused bias against exports is offset by giving the import premiums to exporters through schemes, such as supply of imported materials at international prices, and so on, and by using exchange rate adjustment more freely and thereby directly reducing import premiums and hence the bias against exports. The result is generally (not always) to eliminate or reduce the bias against exports rather than to create excessive bias for exports. Because of budgetary considerations, cash subsidies that could conceivably create massive bias for exports are usually not substantial (though not unknown). On the other hand, the import-substituting strategy, especially via the mechanisms of import premiums from QRs, can and did typically cause the EER^m to get way out of line with EER_x (which was determined almost exclusively by the exchange rate). The costs of such a substantial fall in EER_x/EER^m below unity are generally not understood and, in any case, do not fall directly on the budget.

We may note the contrasting "static" intersectoral resources allocational incentives under EP and IS strategies, as possibly another contributory factor in the former's superiority. Thus, under the IS strategy, the World Bank studies of Balassa (1971) and the results under the OECD studies of Little, Scitovsky and Scott (1970) had underlined also the variability of these incentives, utilizing the measures of nominal and effective protection. The considerable role played by exchange controls, however, in this process, which cannot be captured by turning premia into implicit ad valorem tariffs, was noted in the OECD study on India by Bhagwati and Desdi (1970) and is brought out amply in the Phase II analyses of different countries in the Bhagwati-Krueger NBER project where the "anatomy of exchange control" is discussed. Bhagwati and Krueger conclude that the EP strategy, i.e. Phases IV and V seem to be characterized by a less chaotic pattern of interindustrial incentives. Thus, for example, the calculation of EER_x for different industries in South Korea during

/Phase IV
Phase IV suggests a less chaotic pattern of interindustrial incentives than for India and other countries in Phase II.

Their analysis also underlines numerous other factors such as the variability in implicit protection resulting from changing import premia, the practice of automaticity in protection of domestic manufactures, the incentives to create excess capacity when imported raw materials are allocated pro rata to installed capacity, etc., which afflict Phase II and IS strategy but which do not obtain anywhere the same degree in Phase IV and EP strategy.

While the factors just noted are probably the ones that are critical in defining the asymmetrical outcomes under the IS and the EP strategies, some additional factors may be cited that might contribute to the asymmetry but for which no systematic evidence is yet available.

Thus, one could argue that the export-promoting strategy may lead to a generally reduced reliance on direct or physical, as distinct from price measures. Direct controls have been argued with plausibility, in the Bhagwati-Krueger project studies as also in the earlier OECD work, to be very costly in practice. It is possible that the general incidence of such direct controls may be significantly less under export promotion because price, distribution, and other controls may make little sense to bureaucrats when firms' outputs are mainly addressed to overseas, rather than domestic, markets. A different, and perhaps more perceptive, formulation of this kind of contrast was well put by an economist familiar

As it happens, there is also some statistical argumentation to suggest that the export promotional policies in a Phase IV country such as South Korea may have led to some wasteful export promotion, rather similar to the wasteful import substitution noted for Phase II countries. Thus, Wontack Hong has produced estimates recently of social losses from certain exports from South Korea.

But when all this is noted, it still seems reasonable to conclude that the EP strategy under Phases IV and V does appear, in practice, to be characterized by a less chaotic and more neutral pattern of interindustrial incentives than does the IS strategy under Phase II. Whether this contrast is truly large and, in turn, makes for a substantial impact on the returns to overall investment is difficult to judge, however. That it should go some way toward explaining the superior growth performance of the EP strategy countries, on the other hand, should not be open to serious dispute.
with both the Indian (Phase II) and the South Korean (Phase IV) trade régimes. The Indian régime consists mainly of "don't's", whereas the Korean régime consists mainly of "do's". Whether these contrasts are, in a basic political sense, endemic to the two strategies being contrasted is not clear, but the Bhagwati-Krueger project studies do suggest that they exist currently.

In the still more grey area, one may argue that the EP strategy must produce, through international competition, greater efficiency than the IS strategy with its sheltered markets. While this argument is plausible a priori, there is as yet no real evidence at all on the subject. The issue besides is complex as domestic competition may be sufficient to provide the incentive to efficiency under import substitution whereas exports may be to imperfectly competitive foreign markets or may simply be subsidized to the point necessary to offset any possible inefficiency-raised cost disadvantage. The Bhagwati-Krueger project found little convincing evidence on these questions.

Then, there is the factor of economies of scale, long recognized in international trade theory and policy discussions relating to customs unions, free trade areas, and similar cases where the size of the market is critical to the analysis of economic efficiency. In relation to the EP strategy, it seems plausible to argue that the creation of incentives (or rather, the elimination of the disincentives) to enter the foreign markets augments the size of the market and hence will lead to greater exploitation of economies of scale. Again, however, the issue is more complex in so far as the growth of firm size may be constrained by other policies and objectives (as in India) so that export promotion may take place from firms with constrained sized by diversion from domestic production and/or by growth of new licensed firms of small size. Again, therefore, the statistical evidence and analysis of this possible cause of asymmetrical advantage of the EP strategy is not yet available in anything like the degree that would be reasonably compelling; but it does remain a plausible hypothesis.

(3) In regard to the general easing of the balance of payments (and hence of the losses that attend restrictive payments policies) under
the EP strategy, it is also worth noting that this effect was reinforced in the countries, in the Bhagwati-Krueger project, by the substantial inflow of foreign capital that seems to attend such strategy. While different political factors help to explain the substantial inflows of foreign funds in South Korea, Brazil and Israel, these are undoubtedly to be supplemented by economic factors in the case of the former two countries. For South Korea, in particular, the proportion of aggregate investment coming from foreign saving has run at well over a third on the average and, as a proportion of GNP, foreign saving has run at an average of as much as around 10% during 1960-1971.

This inflow is not exogenous to the EP strategy, as is sometimes assumed, but can be seriously argued to be a result in large part of the EP strategy itself. Thus, while the bulk of the Korean and Brazilian influx of foreign funds is through public borrowing rather than through inflow of direct investment, this borrowing would not have been possible were it not for an export performance that was perceived to be truly remarkable and as a sign of the ability of the country to avoid the "transfer problem" difficulties that could otherwise be expected to follow from sizeable external borrowing. It is of course well known that private bankers (and the IBRD, Asian Development Bank, etc., which are included under "private", in at least some statistics) look at debt-service/export ratios, so that loans are rather directly linked, in some fashion, to export performance. Hence, it may even be legitimate to regard Brazil's "export-led" growth as merging, via this link between export performance and foreign borrowings, into what Fishlow calls the "debt-led" model of economic growth.

Besides, it can be argued that the large-scale inflow of direct investment, which has also been more sizeable in South Korea (as a percent of GNP) than in the other countries in the Bhagwati-Krueger project, reflects the EP strategy. In fact, it may be argued that, under the EP strategy, both the magnitude of the private (direct) investment inflow and its efficacy in promoting economic growth will be greater over the long haul than under the IS strategy. This contrast may be explained as follows. Regarding magnitude, an EP strategy, with its lack of discrimination against
discrimination against foreign markets, is likely to attract foreign firms essentially on the nineteenth-century pattern of "factor endowment" advantages. Whereas in the nineteenth century, this meant natural resources, today it means exploiting Heckscher-Ohlin style low wages. On the other hand, by creating "artificial" inducement to invest via tariffs and/or QRSs, so that one gets "tariff-jumping" investments oriented to the domestic market alone, IS strategy provides an artificially limited incentive to invest in the country. The lack of complete time-series data on direct investment magnitudes in the countries in the project and elsewhere prevents a statistical examination of this hypothesis. But it seems reasonable enough, with due adjustments being made for differences among countries on account particularly of their economic size, political attitudes to foreign investment, and political stability more generally.

As regards the efficiency of foreign direct investment under the EP strategy, it can again be argued that "tariff-jumping" investments induced by the IS strategy are more likely to imply social losses or (at minimum) reduced gains than investments attracted by Heckscher-Ohlinesque factors. Thus, several trade theorists have recently argued succinctly that tariff-induced investment in a 2 x 2 trade-theoretic model of a small open economy that imports capital-intensive goods will, for small changes, worsen the welfare loss that the tariff itself implies. As long, therefore, as the IS strategy leads to inflows within the range short of autarky, which seems reasonable, the inflows of foreign capital will be immiserizing rather than welfare-improving.

Finally, it should be noted that there is little evidence that the EP countries are technically more progressive or that they have higher savings ratios because of a larger export sector. The superior economic performance of the EP strategy therefore cannot be additionally explained, at least on current evidence, by these "dynamic" considerations.

In conclusion, we may make two remarks:

First, the transition to Phase IV and EP strategy does require a change of gear. The outward orientation will mean a shift in existing income distribution among the tradeable industries and between them and non-tradeables. Moreover, it also means a greater integration into the international economy
international economy and hence may raise again the familiar worries about greater vulnerability to the external situation. Of course, short of complete autarky, no country can insulate itself from foreign disturbances. Moreover, it can be argued that a superior export performance, by increasing a country's ability to borrow in the world's capital markets and at the IMF more readily, increases the capacity to meet foreign-induced disturbances, while it may actually reduce the need to do so since export promotion often is accompanied by export diversification.

Second, we must raise the question whether the emergence of "new protectionism", especially in EEC, will permit many developing countries to shift to the EP strategy. Of course, we must not commit the fallacy of composition, noted by Donges (1978): new developing country exports of manufactures need not be identical to the old ones whereas intra-developing country trade expansion may also assist in absorbing the exports that result from shift of more developing countries to the EP strategy. Hence the pressure on the import-competing industries of the developed countries need not rise pari passu with this shift. But that it would increase substantially, and is indeed expected to, is beyond doubt.

C.(1) Employment effects via sectoral composition of production

Now, we need to remind ourselves again that a more rapid growth of GNP does not necessarily imply a greater demand for labour and hence, under plausible assumptions, more employment. In fact, the early arguments of Galenson and Leibenstein, Dobb and other proponents of the use of capital-intensive technology in labour-abundant countries, and hence (under Marx-Lewis type assumptions) of reduced employment of labour in the modern sector, were based precisely on the notion that there was a tradeoff between growth and current employment.

It seems, however, that one of the major surprises of the empirical experience of the preceding three decades is that the EP strategy has also been labour-intensive, while being also characterized (as we have just noted) by rapid growth! Countries which have therefore gone by their so-called "static comparative advantage" have not merely provided more jobs right away but also grown rapidly and have therefore made a substantially greater dent on poverty (though, in the case of South Korea and Taiwan, the presence of earlier land reforms has contributed to the trickle-down process to a major degree).

/Quite aside
Quite aside from the evidence on the labour-intensity of the industrialization in the EP strategy countries, especially in the Far East, the support of this general view has recently received considerable support from empirical studies. Thus, the Bhagwati-Krueger NBER project already suggested for Chile and Turkey that exporting activities had lower capital-intensity than import-competing activities (cf. Bhagwati, 1978, p. 214).

A most valuable subsequent NBER project, directed by Krueger and addressing this precise question, has come up with yet further evidence that supports the same conclusions. Thus, in a summary paper, Krueger (1978) has argued that, using the index of "the labour content of trade per unit of domestic value added (DVA) in domestic production of tradeables", her project leads to the conclusion that "in nearly all cases and in all cases of HOS/Heckscher-Ohlin-Samuelson, i.e., where factor proportions are likely to matter in determining comparative advantage goods, exports are less labour-intensive than import-competing industries" (pp. 272-273). This conclusion, however, is not supported in all the Latin American studies, as reported in table I, here, with Chile being a principal exception that is probably explained by Chile's preponderance of trade with other developing countries. For, Krueger also argues that the intra-developing-country trade often is less labour-intensive for exports than the trade with the developed countries. Note, moreover, that the labour-intensity of exports to developed countries seems to hold up a little less for value added at international prices - this is true for Uruguay, in particular, in table I though the alleged labour-intensity of exports to developed countries seems to generally survive in the Krueger project.

Table II presents, for the four Latin American countries in the Krueger project, similar results on the skill content per unit of employment in competitive imports and exportables (which are HOS-type rather than natural-resource-specific). While the differences do not look dramatic enough to probably lie outside of the range of error that one might expect, given the nature of the data one is working with, the exports to DCs do seem to be skill-intensive.

/Table I
### Table I

**Labor Requirements in 4 Latin American Countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>BRAZIL (2)</th>
<th>CHILE</th>
<th>COLOMBIA</th>
<th>URUGUAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient (1)</td>
<td>$\xi^*/v$</td>
<td>$\xi^*/p$</td>
<td>$\xi^*/p_H$</td>
<td>$\xi^<em>/p^</em>_H$</td>
</tr>
<tr>
<td><strong>Competitive Imports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>31</td>
<td>43</td>
<td>60</td>
</tr>
<tr>
<td>From Developed Countries</td>
<td>43</td>
<td>60</td>
<td>75</td>
<td>91</td>
</tr>
<tr>
<td>From Developing Countries</td>
<td>42</td>
<td>61</td>
<td>104</td>
<td>117</td>
</tr>
<tr>
<td><strong>Exports (non-Resource-based)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>37</td>
<td>34</td>
<td>58</td>
</tr>
<tr>
<td>To U.S.</td>
<td>100</td>
<td>38</td>
<td>61</td>
<td>99</td>
</tr>
<tr>
<td>To EEC</td>
<td>104</td>
<td>38</td>
<td>99</td>
<td>39</td>
</tr>
<tr>
<td>To LAFTA</td>
<td>79</td>
<td>34</td>
<td>29</td>
<td>50</td>
</tr>
<tr>
<td>To other Developing Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>1970/72</td>
<td>1966/68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBER-Country Studies, Table #</td>
<td>8/9</td>
<td>8/9</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

**Notes**

(1) $\xi^*$ = Direct labor requirement per unit of gross output

(2): Excludes agricultural inputs.
### Table II

Indexes of Skill Content per Unit of Employment

<table>
<thead>
<tr>
<th>Country</th>
<th>BRAZIL</th>
<th>CHILE</th>
<th>COLOMBIA</th>
<th>URUGUAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$q$</td>
<td>$q^*$</td>
<td>$q$</td>
<td>$q$</td>
</tr>
<tr>
<td><strong>Competitive Imports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>199</td>
<td>3.93</td>
<td>2.42</td>
</tr>
<tr>
<td>From Developed Countries</td>
<td>-</td>
<td>-</td>
<td>3.92</td>
<td>2.46</td>
</tr>
<tr>
<td>From Developing Countries</td>
<td>-</td>
<td>-</td>
<td>3.71</td>
<td>2.21</td>
</tr>
<tr>
<td><strong>Exports (non-resource-based)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>187</td>
<td>4.14</td>
<td>2.10</td>
</tr>
<tr>
<td>To Developed Countries</td>
<td>-</td>
<td>-</td>
<td>2.06</td>
<td>0.85</td>
</tr>
<tr>
<td>To Developing Countries</td>
<td>-</td>
<td>-</td>
<td>4.98</td>
<td>2.65</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td>1971</td>
<td>1973</td>
<td>1965/68</td>
<td>1966</td>
</tr>
<tr>
<td>Source: NBER Country Studies Table H0</td>
<td>13</td>
<td>13</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>
| Notes (1) $q$ stands for direct labor use, $q^*$ is direct plus indirect labor requirements.

(2) Skill indexes are based on average remuneration for Brazil, Chile and Colombia. For Uruguay, it is the ratio of total employment to unskilled workers.

/ The conclusion
The conclusion that is suggested then is that a shift to EP strategy would have, if anything, increased the demand for labour, given the labour-intensity of the exportable (HOS) activities. This kind of argumentation is plausible, by and large, but it must be noted that it does depend on the assumptions that average coefficients can be treated as marginal coefficients, that the share of labour to value-added can be treated as an index of labour-intensity meaningfully across industries even within a country, and that the composition of exports and imports will not change with shifts in strategy so as to undermine the ranking of labour-coefficients observed for the IS situation.*

Despite the caveats just entered, it would be fair to say that the burden of proof is now on those who would claim that a shift to the EP strategy might be detrimental to domestic demand for labour and hence (most likely) to income distribution.**

Finally, note that what we have been discussing above are what we may call direct effects of the trade strategy on the composition of production. But there may be others, through induced changes in the composition of domestic demands, although these are clearly more difficult to quantify. One of these possible effects is the impact of a more open economy on the intra-industry product mix, i.e. the types of product used to satisfy similar "needs", as the upper classes adopt the consumption baskets of the developed countries, which are probably less labour-intensive. Another is through induced changes in the income distribution, as there is some evidence of different labour content in the consumption basket at different income levels. Morawetz (1974) surveys some papers showing a moderately higher labour content in the demand of lower income groups; similar results are reported in Soligo (1974); for an opposite result, for Taiwan, however, see Yhi-Hin Hu (1976). Nothing very definitive, therefore, can be said regarding the relative merits of EP and IS strategies in this area.

* We do not touch on other, more technical caveats which may be registered against making unwarranted inferences.

** Our summary of the principal approach and results of the Krueger project do not do justice to the many contributions contained in the individual studies, as exemplified by the paper on Chile by Corbo and Meller (1979).
C. (2) Employment effects via choice of techniques of production

We must next analyse the question whether a shift to the EP strategy from an IS strategy would affect labour-use by also affecting choice of technique *ex ante* or by affecting the degree of utilization of installed capacity.

This question presupposes, of course, the possibility of choice among alternative techniques, given the production structure. Few people today would doubt that such choice exists; and much evidence has been produced in the last two decades on this question, as surveyed most usefully by White (1978), who distinguishes among econometric, engineering and "anecdotal" evidence to this effect. That such choice would obtain was emphasized by many economists from the earliest analysis in developmental economics; e.g. Bhagwati (1966) where numerous ways of substituting capital for labour were discussed, including those resulting from breakdown of equipment. It was only the influence of the Cambridge school, with its emphasis on fixed coefficients and the ideological opposition to substitution as the cornerstone of neoclassical economics, that misled several economists at the time into ignoring the obvious!

Trade strategy can affect choice of techniques in an anti-labour fashion by distorting incentives and imposing artificial constraints. The Bhagwati-Krueger project produced several illustrations of the latter, as when *used machinery imports* were proscribed under Phase II because of fear of transfer pricing, for example. Again, an incentive distortion that was frequently cited in their project was the *artificial cheapening of capital goods*, due to preferential effective exchange rates thereon. More detailed analysis of this type of distortion has been undertaken in the later Krueger NBER project. Thus, Corbo and Meller (1979) report that "employment requirements are around 6% lower, capital requirements are around 20% higher, and skill requirements around 6% lower than in a situation without this distortion" (p. 200).

Capital can be substituted for labour also by varying shifts, for example. For evidence on this for Latin America, see Schydowsky (1976) and Ramos (1975). Authors such as Pinto (1975) and Foxley and Muñoz (1976), who emphasize the structural heterogeneity of production and employment in Latin America are also indirectly arguing for the existence of alternative techniques, although with a sufficiently fine definition of products we would have to recognize that firms using different technology are probably not producing "the same thing".

Furthermore, Bhagwati
Furthermore, Bhagwati (1978, pp. 101-110) has noted that many Phase II regimes have been characterized by underutilization of capacity, related to the shortage of imported raw materials. Bottlenecks arise often as a result of administrative rigidity of response to unfolding situations, making resumed capacity utilization difficult. In certain countries, the practice of relating such material allocations pro rata to installed capacity also meant that the efficient firms could not drive out the inefficient firms through competition in the market for scarce raw materials, thus perpetuating low utilization among both sets of firms. Moreover, the access to premia-carrying imported materials, pro rata to installed capacity, also implies that, ceteris paribus, the result is to create an inducement in the direction of installing capacity in the teeth of existing underutilization of capacity in the industry.

All these incentives to creating underutilization of capacity apply equally to shift utilization, of course. And a fair amount of empirical often regression-type evidence linking the trade regimes to capacity underutilization has been attempted, as reviewed in Bhagwati (1978), with the greatest success in relating capacity utilization to variations in import availability.*

A related point, involving capital-intensity from a different angle, concerns the tendency of Phase II regimes to encourage increased holdings of inventories owing to feared interruptions of supplies and also because raw material allocations are frequently handed over directly to producer-users rather than to traders, thus undermining the centralization and economy in reserve holding that obtains with trader-held inventories. The empirical evidence on this type of inefficiency in the NBER project has been summarized in Bhagwati (1978, pp. 110-112) and generally seems consistent with the presumption just outlined, though some of the attempts at establishing such a relationship were unsuccessful because increased inventory holdings, while profitable, are often also unfeasible because of tight allocations.

* There are many data, and interpretational problems here, so that the empirical work is somewhat less compelling than the a priori incentive arguments detailed above.
DEVELOPED COUNTRY POLICIES

Whereas the preceding analysis underlines the advantages in shifting to an outward-looking EP trade strategy and the definite role that this can play in improving current and future demand for labour, we may now mention in conclusion two external developed country policy issues that bear on the questions at hand.

A. The New Protectionism

This is not the occasion to document the protectionist threat, especially from the EEC that is drawing a great deal of attention these days. One important point however needs to be made here related to the effect of this on resource-allocation in developing countries.

The threat has been primarily directed at labour-intensive manufactures from developing countries. As it happens, the EEC countries and the United States are being squeezed from the advanced industries of Japan and the traditional labour-intensive industries from the so-called NICs (newly industrialized countries). The shift in comparative advantage that this represents, combined with growing rigidity in the social structure and unwillingness to permit structural unemployment at times of high rates of overall unemployment, have led to increased demands for protection and to the French concept of "organized free trade" which is primarily aimed at extending the LTA-type arrangements to many other products. Given the labour-intensity of these developing-country exports, it follows that the protection of these industries in the developed countries amounts to a forced shift, at the margin, of the resource allocation in the developing countries towards capital-intensive activities; hence, to an adverse impact on the objective of increasing both current employment and, as we have seen, growth. In this context, the ILO study by Lydall (1976), who estimated a substantial employment impact of potential tariff cuts by developed countries...
on selected products exported by the developing countries is relevant.*

Of equal interest is the Brookings Institution estimate by Cline et al. (1978), reported by Birnberg in Cline (1979). Birnberg reports that, with some adjustment, this calculation shows an impact of Tokyo Round tariff cuts on Latin American exports to developed countries of US$ 300 million in 1974 prices, the main beneficiaries being Mexico, Brazil, Argentina and Peru.

B. Migration restrictions

It would be a mistake to conclude this paper without even a nod in the direction of international migration and its role in alleviating poverty in the developing countries. We will content ourselves with a few remarks, distinguishing among skilled and unskilled migration.

(1) Skilled and professional. At one stage, the conventional wisdom on the "brain-drain" turned into the reverse orthodoxy that the migration of highly skilled manpower really reflected internal over-expansion of unemployable professionals so that the migration was really a "safety valve" which reduced unemployment. If so, such migration as is permitted by the developed countries, under their immigration laws, would be a welcome phenomenon at this Conference.

We would merely like to note here that this view may be too complacent, being based on the notion that the oversupply of professional manpower is independent of the possibility of external migration. Economists such as Bhagwati and Hamada have recently analysed models where the increased expected salary levels which follow from such external emigration results in the educational sector's over-production of professionals. Thus, for example, emigration of 10 unemployed engineers at the substantially higher salary levels in the USA relieves immediate unemployment but it may result in 200 graduates opting to be engineers. With external migration being restricted by developed country immigration restrictions, however, only

*/  Lydall's calculations raise a number of technical issues which we do not go into here. For example, while he considers the effect of increasing exports from developing countries thanks to the tariff cuts, he does not consider the symmetric (employment-reducing) effects of increasing imports as export earnings increase.

/20 can
20 can immigrate, so that the remaining 180 would be added to the pool of unemployed domestically! Thus, in the presence of immigration restrictions, the Bhagwati-Hamada type of model, which is possibly more realistic, would increase, rather than diminish, unemployment of the professionals in question! Unfortunately, especially in Latin America, there is little empirical analysis of these issues, so that it is impossible for us even to speculate regarding the effects on employment in these countries which follow from the migration of professional manpower.*

(2) Unskilled. Evidently, in the presence of poverty, the possibility of exporting unskilled labour for employment abroad is a classic remedy. The growth of Western Europe after the Second World War illustrates the advantages that generally accrued to all parties from the migration of the so-called "gastarbeiters".** The legal and illegal migrants from Mexico to the United States have certainly helped alleviate Mexico's poverty and unemployment problems. A greater flow of such migrants, resulting from reduced immigration restrictions by the developed countries, would help. Unfortunately, while migration during the period of European expansion in the 19th century, was nearly free, immigration restrictions have come now to be accepted as consistent with human rights and with the international order! Therefore, beyond noting migration as a possible way of alleviating domestic poverty and unemployment, we cannot really argue that this offers a hopeful remedy in the climate of present intellectual and public opinion in the developed countries.

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* Above, we have touched only on one aspect of the effects of international migration. A complete analysis would raise many other issues, including effects on income distribution, income, growth, etc.

** We do not mean to deny that several human-rights and other problems have arisen from this phenomenon. For example, the tendency of the European countries to return the foreign workers to their countries of origin whenever recession began, thus cushioning their own native workers, has created serious problems for both the migrants and their countries of origin.
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